

REMARKS

By the present Amendment, claim 1 has been amended to define one aspect of the present invention with greater precision. In particular, claim 1 now recites, a flame-retardant polyamide composition which comprises, *inter alia*, 5 to 40% by mass of a halogen-containing organic flame retardant (B) and 0.5 to 10% by mass of zinc borate and zinc phosphate (C), wherein the mass ratio of zinc borate and zinc phosphate is 1:0.1 to 1:5.

. Support for the recitation of a halogen-containing organic flame retardant may be found in the specification such as in the paragraph beginning at page 11, line 8. In addition, it will be noted that each of the illustrative Examples set forth in Table 1 on pages 28 and 29 include a halogen-containing organic flame retardant so that the claims are further in-line with the advantageous results shown in the specification. Such results clearly show that the claimed composition with the recited components, including the halogen-containing organic flame retardant and the combination of zinc borate and zinc phosphate, can provide superior results with respect to one or more of the described characteristics, such as excellent flame retardancy, improved toughness and color stability.

Newly cited Horacek et al., U.S. Patent No. 6,031,032, does not disclose or suggest the invention as defined in the claims of record. The patent relates to a glass fiber-reinforced polyamide resin composition with 10 to 40% by weight of melamine- or melem-phosphoric acid reaction products or mixtures thereof as flame retardants and 10 to 60% by weight of glass fibers. As the Examiner has noted, the patent further discloses in the paragraph beginning at column 3, line 17 that co-flame

retardants can be present which are zinc borate, zinc phosphate, melamine sulfate or ammonium polyphosphate.

Horacek et al. does not teach the specifically defined composition as recited in claim 1 which includes the specified amount of halogen-containing organic flame retardant. In fact, in the same paragraph in column 3 referred to above, the patent specifically states a preference for "halogen-free flame retardants" and each of the specific flame retardants (V-1 to V-5) at the bottom of column 4 is a halogen-free material. Thus, if anything, Horacek et al. would lead those of ordinary skill in the art away from the present invention and it has long been held in decisions such as *In re Mercier*, 185 USPQ774 (CCPA 1975) that the relevant portions of a reference include not only those teachings which would suggest particular aspects of an invention to one having ordinary skill in the art, but also teachings which would lead such a person away from the claimed invention.

Horacek et al. is further deficient by failing to teach the claimed combination of zinc borate and zinc phosphate in the recited mass ratio. To the extent that the compositions set forth in Table 1 in column 5 of the patent include one of the compounds, it is used alone. There is nothing in the patent that teaches the combination of the two compounds and certainly nothing that recognizes the advantages which can be obtained in accordance with the present invention. To place this latter point in greater context, applicant notes that in the header of Table 1, the patent describes the use of 1.6 mm test specimens. Such specimens can be contrasted with the 1/32 inch test pieces used in the flammability test described at the top of page 23 of the specification. The use of thinner test pieces provides an even greater challenge and yet the compositions of the present invention can

provide the advantageous results shown on page 29, including excellent flame retardancy.

For all the reasons set forth above, applicant respectfully maintains that based on claims and evidence of record, the claims are clearly patentable over the cited prior art and therefore requests reconsideration and allowance of the present application.

Should the Examiner wish to discuss any aspect of the present application, she is invited to contact the undersigned attorney at the number provided below.

The Director is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17 and 1.20(d) and 1.21 that may be required by this paper, and to credit any overpayment, to Deposit Account No. 02-4800.

Respectfully submitted,

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